2018-19 Weekly Influenza Update



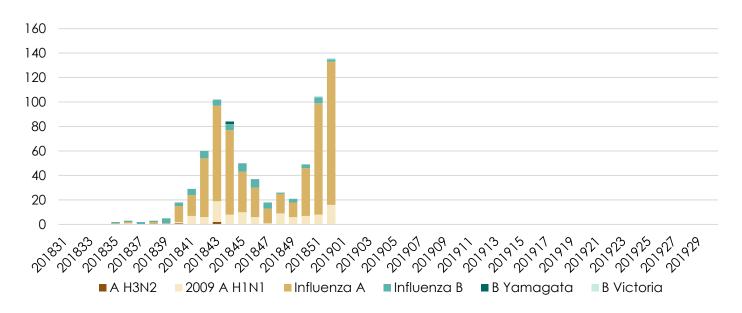
Preliminary data through week 201852, the week ending 12/29/2018 Edited by: Laura Cronquist, Enteric/Vectorborne/Zoonotic Disease Epidemiologist

Overview

As of this week:	This season (2018-19)	Last season (2017-18)
Cases reported for the week	136	404
Cumulative cases for season	750	1477
Activity level	Regional	Widespread

Influenza activity in North Dakota has increased again this week and continues to increase nationwide. The percentage of influenza tests conducted at North Dakota laboratories that were positive is now above 15%. Over half of our current cases are children, a pattern typical for seasons in which the 2009 A H1N1 pandemic strain predominates. However, it is still too soon to tell if this strain will predominate for the entire season.

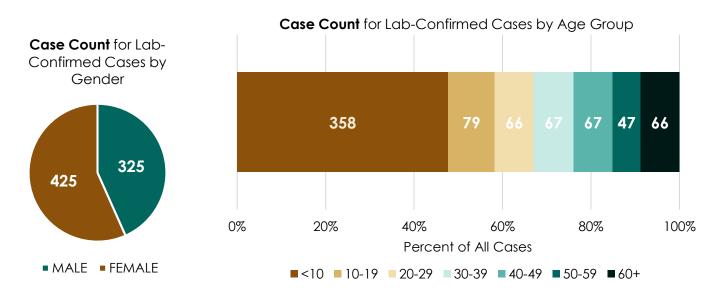
Number of Reported Laboratory-Identified Influenza Cases by Week Number



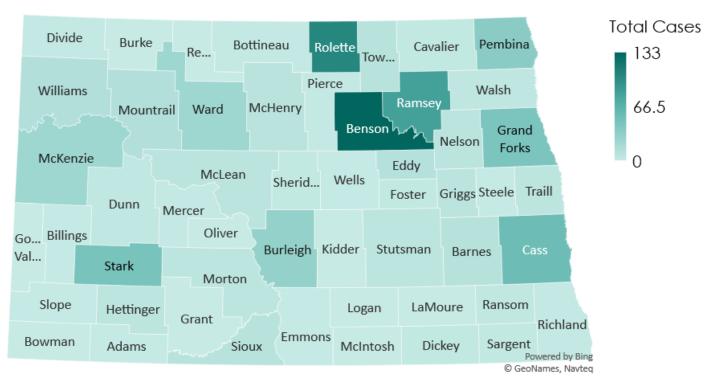
Number of cases:	A H3N2	2009 A H1N1	Influenza A	Influenza B	B Yamagata	B Victoria
This week	0	16	117	2	0	1
This season	3	103	574	66	2	2

Laboratory-confirmed influenza is a reportable disease in North Dakota. Influenza "cases" include people that have tested positive for influenza in a healthcare setting. It does not include people with influenza who did not seek healthcare, or who were diagnosed without a lab test, which is common. The true number of people with influenza in North Dakota is underrepresented, but case data allows us to see where and in what populations influenza is circulating. It also provides context regarding how the current season compares with previous seasons. Find more information about cases on www.ndflu.com.

Case Demographics



Cases by County



Outbreaks

During the influenza season, influenza outbreaks are common anywhere people gather, including schools, child care centers, and health care facilities. Outbreaks of influenza or influenza-like illness may be reported to the NDDoH. The following outbreaks have been reported this season:

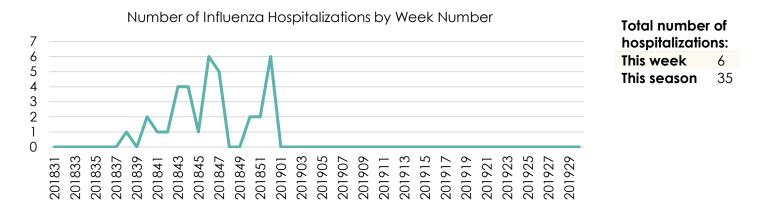
Setting	Number of outbreaks	Identified pathogens
Long Term Care, Basic Care, Assisted Living	3	1 flu A/flu B; 1 rhinovirus/Haemophilus influenzae; 1 unknown
Schools	0	
Child Care Centers	1	1 influenza A

Surveillance Programs

In addition to case reporting, the NDDoH uses a variety of information sources to fully describe what is happening during the influenza season.

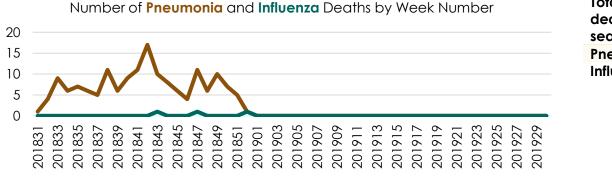
Hospitalizations

This season, the NDDoH has introduced a new influenza hospitalization surveillance program. Select North Dakota hospitals report the number of influenza-related hospitalizations weekly to the NDDoH. Because this surveillance methodology is new, hospitalization numbers this year may not be comparable to those seen in previous years.



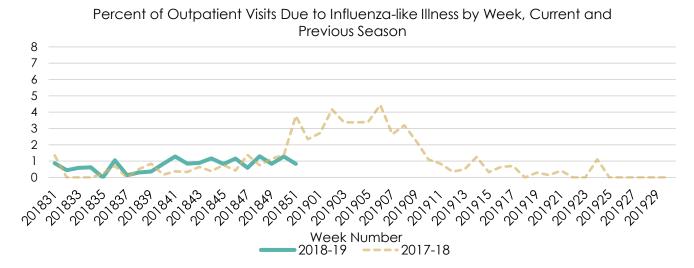
Deaths

Data on pneumonia and influenza deaths is obtained from Vital Records and based on the cause of death listed on the death certificate.



Outpatient Influenza-like Illness

The NDDoH participates in the national U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). Data from participating outpatient providers in North Dakota are pooled to create a state-wide estimate for the weekly percent of healthcare visits due to influenza-like illness (ILI). Patients presenting with a fever of 100°F or greater and a cough and/or sore throat are considered to have ILI. For more information on state and national ILINet data, see <u>FluView Interactive</u>.

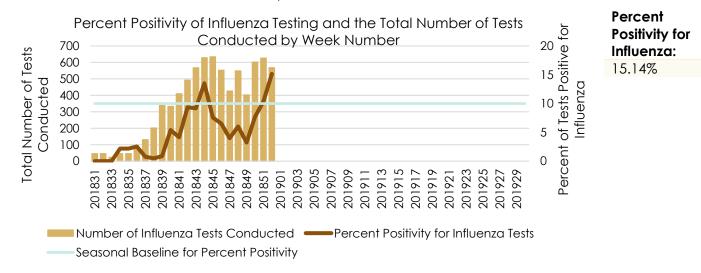


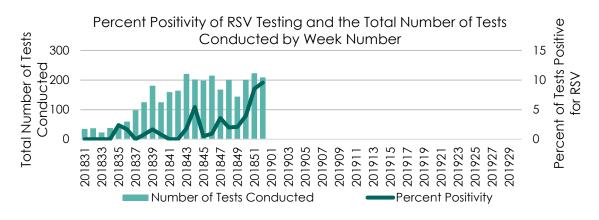
Week	Percent ILI	# ILI 0-4	# ILI 5-24	# ILI 25-49	# ILI 50-64	# ILI 65+	Total #
Number		age group	age group	age group	age group	age group	visits
201849	0.84%	12	4	7	3	2	3339
201850	1.29%	10	19	10	5	2	3565
201851	0.84%	12	9	7	3	2	3945
201852*	2.56%	19	10	11	3	4	1835

^{*} Reports have not been received from all facilities for MMWR week 52.

Sentinel Laboratory Data

The NDDoH receives influenza and RSV testing data from participating sentinel laboratories across the state. The total number of positive tests and the total number of tests conducted are reported and used to create a state-wide percent positivity statistic. For influenza, percent positivity of 10% or greater indicates "season level" influenza activity.

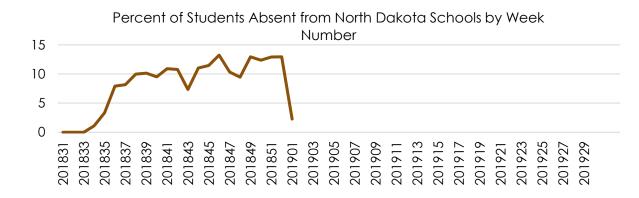




Percent Positivity for RSV: 9.57%

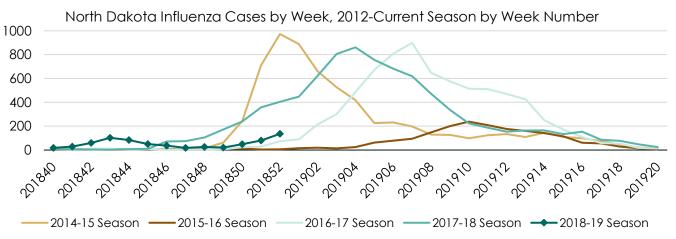
School Absenteeism

During the influenza season, increases in school absenteeism data can be used as an early indicator for influenza circulation. The NDDoH received absenteeism data from a majority of schools in the state. Data here include absences for all reasons.



Percent of Students Absent 2.26%

Multi-season Comparison

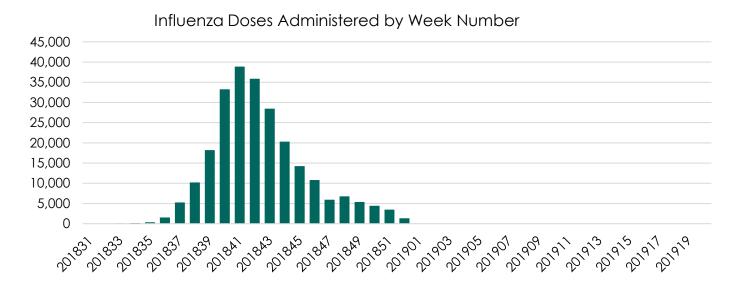


Season	Total Cases	Peak Week (week ending)	Predominant Strain
2014-15	6,443	12/27/2014	A H3N2 (vaccine mismatch)
2015-16	1,942	3/12/2016	2009 A H1N1
2016-17	7,507	2/18/2017	A H3N2
2017-18	8,498	1/27/2018	A H3N3
2018-19	750 (current)	TBD	TBD

2018-19 Vaccination Stats

Vaccine Doses Administered

The North Dakota Immunization Information System (NDIIS) provides information on vaccines given in North Dakota. Vaccines given to children are required to be entered into the NDIIS, while vaccines given to adults are often entered into the NDIIS but are not required to be entered. Many providers in North Dakota have established an electronic connection with the NDIIS, allowing all vaccinations for that provider to be sent to the NDIIS automatically. A total of **244,918** doses of 2018-19 influenza vaccine have been entered into the NDIIS so far this season.



Vaccination Rates by Age

NDIIS data can also be used to estimate the percent of North Dakotans in each age group that have received an influenza vaccination so far this season. This week, the age group with the highest rates is 65+ with 50.8%, and the age group with the lowest vaccination rate is 19-49 year-olds, with 18.3%.

